

## General Assembly

## **Amendment**

January Session, 2005

LCO No. 6861

\*SB0125806861SD0\*

Offered by:

SEN. HARTLEY, 15<sup>th</sup> Dist. SEN. LEBEAU, 3<sup>rd</sup> Dist. REP. BERGER, 73<sup>rd</sup> Dist.

To: Subst. Senate Bill No. 1258

File No. 666

Cal. No. 476

## "AN ACT CONCERNING THE PROMOTION OF COLLABORATIVE RESEARCH APPLICATIONS WITH INDUSTRY."

- 1 Strike everything after the enacting clause and substitute the
- 2 following in lieu thereof:
- 3 "Section 1. Subsection (b) of section 4-124ff of the general statutes is
- 4 repealed and the following is substituted in lieu thereof (Effective July
- 5 1, 2005):
- 6 (b) There is established a Council of Advisors on Strategies for the
- 7 Knowledge Economy to promote the formation of university-industry
- 8 partnerships, identify benchmarks for technology-based workforce
- 9 innovation and competitiveness and advise the award process (1) for
- 10 innovation challenge grants to public postsecondary schools and their
- 11 business partners, and (2) grants under section 2 of this act. The
- 12 council shall be chaired by the director of the Office of Workforce
- 13 Competitiveness and shall include the Secretary of the Office of Policy

14 and Management, the Commissioners of Economic and Community

- 15 Development and Higher Education, [and] the Labor Commissioner,
- 16 the executive directors of Connecticut Innovations, Incorporated and
- 17 <u>the Connecticut Development Authority</u> and four representatives from
- 18 the technology industry, one of whom shall be appointed by the
- 19 president pro tempore of the Senate, one of whom shall be appointed
- 20 by the speaker of the House of Representatives, one of whom shall be
- 21 appointed by the minority leader of the Senate and one of whom shall
- be appointed by the minority leader of the House of Representatives.
- 23 Sec. 2. (NEW) (Effective July 1, 2005) (a) The Office of Workforce
- 24 Competitiveness shall, within available appropriations, establish a
- 25 grant program to provide a flexible source of funding the creation and
- 26 generation of talent in institutions of higher education and, with
- 27 appropriate connections to vocational-technical schools and other
- 28 secondary schools, for student outreach and development. Grants
- 29 pursuant to this subsection shall be awarded to institutions of higher
- 30 education and may be used to:
- 31 (1) Upgrade instructional laboratories to meet specific industry-
- 32 standard laboratory and instrumentation skill requirements;
- 33 (2) Develop new curriculum and certificate and degree programs at
- 34 the level of associate, bachelor, master's and doctorate, tied to industry
- 35 identified needs;
- 36 (3) Develop seamlessly articulated career development programs in
- 37 workforce shortage areas forecasted pursuant to subdivision (9) of
- 38 subsection (b) of section 4-124w of the general statutes in collaboration
- 39 with vocational-technical schools and other secondary schools and
- 40 institutions of higher education; and
- 41 (4) Support undergraduate and graduate student research projects
- 42 and experimental learning activities.
- 43 (b) The Office of Workforce Competitiveness shall, within available
- 44 appropriations, establish a grant program to provide funding for the

45 advancement of research capabilities and research opportunities.

- 46 Grants pursuant to this subsection shall be awarded to institutions of
- 47 higher education and technology focused organizations and may be
- 48 used to:
- 49 (1) Recruit eminent faculty in basic and applied research;
- 50 (2) Leverage federal funding for research centers; and
- 51 (3) Provide pilot funding for faculty to develop initial research data
- for the development of larger grant funding proposals and to nonstate
- 53 granting entities, such as federal agencies.
- 54 (c) The Office of Workforce Competitiveness shall, within available
- 55 appropriations, establish a grant program to provide funding for the
- 56 promotion of collaborative research applications between industry and
- 57 institutions of higher education. Grants pursuant to this subsection
- 58 shall be awarded to institutions of higher education, technology
- 59 focused organizations and business entities may be used:
- 60 (1) To improve technology infrastructure by advancing the
- development of shared use between institutions of higher education
- 62 and business entities of laboratories and equipment, including, but not
- 63 limited to, technology purchase, lease and installation, operating and
- 64 necessary support personnel and maintenance; and
- 65 (2) As matching grants for joint projects between an industry, a
- 66 technology focused organization or a university. The office shall
- 67 structure the matching grants to provide two rounds of funding
- 68 annually and shall do outreach to companies. The matching grant part
- 69 of the program shall include, but not be limited to, (A) one-to-one
- 70 matching grants not to exceed one hundred thousand dollars, with in-
- 71 kind match allowed for small and mid-sized companies, (B)
- 72 involvement of a competitive process with outside reviewers using as
- 73 key criteria (i) the demonstration of commercial relevance, and (ii) a
- 74 clear path to the marketplace for any innovations developed in the
- 75 course of the research, and (C) an aggressive marketing campaign

through business organizations to raise industry awareness of resources from universities or technology focused organizations.

- (d) The Office of Workforce Competitiveness shall, within available appropriations, establish a grant program to provide funding for the promotion of commercialization of research done by institutions of higher education. Grants pursuant to this subsection shall be awarded to institutions of higher education and business entities and may be used to:
  - (1) Provide funding to verify the technical and commercial feasibility of early stage discoveries by institutions of higher education that are disclosed or patented to accelerate and increase the likelihood that the technology will be successfully commercialized; and
- 88 (2) Provide matching support for smaller institutions of higher 89 education to allow for contracts with independent technology transfer 90 organizations to provide specific service to support specific needs.
- 91 Sec. 3. (NEW) (*Effective July 1, 2005*) Grants under section 2 of this act shall be awarded based on the following order of priority:
- 93 (1) Grants that focus on key technology areas to give Connecticut a 94 competitive advantage in the knowledge economy;
- 95 (2) Grants that create certificate and degree programs to encourage 96 talent generation;
- 97 (3) Grants that promote multiinstitutional collaboration across 98 public and private institutions of higher education;
- 99 (4) Grants that involve multiple activities, enhance research 100 capabilities, promote applied research collaborations and advance the 101 commercialization of research of institutions of higher education; and
- 102 (5) Grants that include matching funds from institutions of higher 103 education, technology focused organizations or business entities.

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Sec. 4. (NEW) (Effective from passage) (a) The Office of Workforce Competitiveness shall, within available appropriations and in consultation with the nanotechnology advisory council established under subsection (b) of this section, prepare recommendations to advance this state's position in nanotechnology development, including recommended state investments to increase university research, develop centers of excellence and shared use facilities, promote partnerships and collaborations involving technology-based business and industry with institutions of higher education, leverage current federal resources and advance education and training programs in nanotechnology fields. No later than January 1, 2006, the Office of Workforce Competitiveness shall report its findings, in accordance with section 11-4a of the general statutes, to the joint standing committee of the General Assembly having cognizance of matters relating to higher education and employment advancement.

- (b) The Office of Workforce Competitiveness shall establish an Advisory Council on Nanotechnology to guide the work set out under subsection (a) of this section. The advisory council shall be chaired by the executive director of the Office of Workforce Competitiveness and shall include representatives from state agencies, including the Department of Economic and Community Development, the Connecticut Development Authority and Connecticut Innovations, Incorporated, public and private institutions of higher education and representatives from the technology industry and technology focused organizations selected by the executive director of the Office of Workforce Competitiveness.
- Sec. 5. (NEW) (Effective from passage) (a) The Commissioner of Economic and Community Development, the chairperson of Connecticut Innovations, Incorporated, the president of The University of Connecticut and the chairperson of the Connecticut Development Authority, or their respective designees, shall prepare, within available consultation with the appropriations, and in Governor's Competitiveness Council, the Commissioner of Education, the Commissioner of Higher Education, the chancellors of the community-

technical college system and the Connecticut State University system, the director of the Office of Workforce Competitiveness and any other agencies and leading technology focused organizations deemed appropriate by the Commissioner of Economic and Community Development, recommendations for an implementation plan and budget to establish an Innovation Network that will include the following: (1) The creation of endowed chairs and the hiring of leading academic professionals in targeted fields based on core competencies to work at universities, state colleges and community colleges, in collaboration with other technology initiatives; (2) the focused and aggressive solicitation of and leveraged partnership with federal research funds; (3) increased corporate-sponsored research; (4) the establishment of at least one innovation accelerator, linked to universities and involving corporations and start-up enterprises focused on advanced technology and leveraging the efforts underway by the Connecticut Center for Advanced Technology in the Hartford area; (5) the strengthening of technology transfer and entrepreneurship activities at universities in the state; (6) incentives and financial support for collaborative research between universities and industry or federally sponsored technology centers; (7) the creation of linkages to angel networks; and (8) the creation of linkages to incubators in Connecticut. Said plan shall also include provisions for the utilization of existing resources, including, but not limited to, Connecticut Innovations, Incorporated, the Connecticut Development Authority, The University of Connecticut and the Office of Workforce Competitiveness.

(b) Not later than January 1, 2006, the Commissioner of Economic and Community Development, in consultation with the chairperson of Connecticut Innovations, Incorporated, the president of the University of Connecticut and the chairperson of the Connecticut Development Authority, shall develop an implementation plan for the Innovation Network, within available resources, and submit said plan and budget to the Governor and the joint standing committees of the General Assembly having cognizance of matters relating to economic

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development, education and labor, in accordance with the provisions of section 11-4a of the general statutes."

This act shall take effect as follows and shall amend the following	
sections:	

Section 1	July 1, 2005	4-124ff(b)
Sec. 2	July 1, 2005	New section
Sec. 3	July 1, 2005	New section
Sec. 4	from passage	New section
Sec. 5	from passage	New section